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NOV 27 2000

TECH CENTER 1600/2900

SEQUENCE LISTING

<110> Luche, Ralf M.
Wei, Bo

<120> DSP-3 DUAL-SPECIFICITY PHOSPHATASE

<130> 200125.408

<140> US/09/544,525
<141> 2000-04-06

<160> 18

<170> FastSEQ for Windows Version 4.0

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<210> 1
<211> 875
<212> DNA
<213> Homo sapiens

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gctagcgttc gccttcagcc accatggga atggatgaa caagatcctg cccggctgt 120
acatcgccaa cttcaagat gccagagacg cggaacaatt gagcaagaac aaggtgacac 180
atattctgtc tgtccacgtat gtcggccatc tatgttggag gacaagacat ttcaaagaaa 240
gtattaaatt cattcacggat tgccggdtcc gccggagat ctgccttgcataat cactgcctgg 300
ccgggggtgtc caggagggtg acactgggtga tcgcatacat catgaccgtc actgactttg 360
gctggggagga tgccctgcac accgtgcgtg cccggagatc ctgtgcacac cccaaacgtgg 420
gcttccagag acagctccag gagtttggat aatcatggatccatcgtat cccggactggc 480
tgaaggaaga atatggagat agccctttgc aggtatgcaga agaagccaaa aacattctgg 540
ccgctccagg aattctgaag ttctgggcct ttctcagaag actgtaatgt acctgaagtt 600
tctgaaatat tgcaaaacccg cagagtttag gctgtgcgtg cccaaaagaa aagcaacata 660
gagtttaagt atccagtagt gatttgtaaa ctgttttttc atttgaagct gaatataac 720
gtatgtcatgt ttatgttggag aactaaggat attctttagc aagagaaaaat atttccct 780
tatccccact gctgtggagg tttctgtacc tcgccttggat gcctgttaagg atccgggag 840
ccttggcgca ctgccttgc ggtggcttgg cgctc 875

a
<210> 2
<211> 167
<212> PRT
<213> Homo sapiens

<400> 2
Met Gly Asn Gly Met Asn Lys Ile Leu Pro Gly Leu Tyr Ile Gly Asn
1 5 10 15
Phe Lys Asp Ala Arg Asp Ala Glu Gln Leu Ser Lys Asn Lys Val Thr
20 25 30
His Ile Leu Ser Val His Asp Ser Pro Gly Leu Cys Trp Arg Thr Arg
35 40 45
His Phe Lys Glu Ser Ile Lys Phe Ile His Glu Cys Arg Leu Arg Gly

50	55	60	
Glu Ser Cys Leu	Val His Cys Leu Ala Gly Val	Ser Arg Ser Val Thr	
65	70	75	
Leu Val Ile Ala Tyr Ile Met Thr Val Thr Asp Phe Gly Trp Glu Asp			
	85	90	95
Ala Leu His Thr Val Arg Ala Gly Arg Ser Cys Ala Asn Pro Asn Val			
	100	105	110
Gly Phe Gln Arg Gln Leu Gln Glu Phe Glu Lys His Glu Val His Gln			
	115	120	125
Tyr Arg Gln Trp Leu Lys Glu Glu Tyr Gly Glu Ser Pro Leu Gln Asp			
	130	135	140
Ala Glu Glu Ala Lys Asn Ile Leu Ala Ala Pro Gly Ile Leu Lys Phe			
	145	150	155
Trp Ala Phe Leu Arg Arg Leu			
	165		

<210> 3
<211> 10
<212> PRT
<213> *Homo sapien*

<400> 3
Val His Cys Leu Ala Gly Val Ser Arg Ser
1 5 10

<210> 4
<211> 23
<212> PRT
<213> *Homo sapien*

<400> 4
Gly Arg Val Leu Val His Cys Gln Ala Gly Ile Ser Arg Ser Gly Thr
1 5 10 15
Asn Ile Leu Ala Tyr Leu Met
20

<210> 5
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer used to obtain full length cDNA encoding
DSP-3

<400> 5
gacctcatqc ttctcaaact cctg

<210> 6
<211> 21
<212> DNA
<213> Artificial Sequence

<220>

<223> Primer used to obtain full length cDNA encoding
DSP-3

<400> 6
cgatcaccag totcacgctc c

21

<210> 7
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer used to obtain full length cDNA encoding
DSP-3

<400> 7
cagaatatgt gtcaccctgt tcttgc

26

<210> 8
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer used to obtain full length cDNA encoding
DSP-3

<400> 8
gcaagaacaa ggtgacacat attctg

26

<210> 9
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer used to obtain full length cDNA encoding
DSP-3

<400> 9
ggaaatggga tgaacaagat cctgcccc

28

<210> 10
<211> 37
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer used to obtain full length cDNA encoding
DSP-3

<400> 10
cagtcttctg agaaaggccc agaacttcag aattcct

37

sub
D1
com

a
CM

<210> 11
 <211> 170
 <212> PRT
 <213> Homo sapiens

<400> 11
 Ser Asp Leu Asp Arg Asp Pro Asn Ser Ala Thr Asp Ser Asp Gly Ser
 1 5 10 15
 Pro Leu Ser Asn Ser Gln Pro Ser Phe Pro Val Glu Ile Leu Pro Phe
 20 25 30
 Leu Tyr Leu Gly Cys Ala Lys Asp Ser Thr Asn Leu Asp Val Leu Glu
 35 40 45
 Glu Phe Gly Ile Lys Tyr Ile Leu Asn Val Thr Pro Asn Leu Pro Asn
 50 55 60
 Leu Phe Glu Asn Ala Gly Glu Phe Lys Tyr Lys Gln Ile Pro Ile Ser
 65 70 75 80
 Asp His Trp Ser Gln Asn Leu Ser Gln Phe Phe Pro Glu Ala Ile Ser
 85 90 95
 Phe Ile Asp Glu Ala Arg Gly Lys Asn Cys Gly Val Leu Val His Cys
 100 105 110
 Leu Ala Gly Ile Ser Arg Ser Val Thr Val Thr Val Ala Tyr Leu Met
 115 120 125
 Gln Lys Leu Asn Leu Ser Met Asn Asp Ala Tyr Asp Ile Val Lys Met
 130 135 140
 Lys Lys Ser Asn Ile Ser Pro Asn Phe Asn Phe Met Gly Gln Leu Leu
 145 150 155 160
 Asp Phe Glu Arg Thr Leu Gly Leu Ser Ser
 165 170

*but
D1
Cone*
 <210> 12
 <211> 168
 <212> PRT
 <213> Homo sapiens

<400> 12
 Asp Arg Glu Leu Pro Ser Ser Ala Thr Glu Ser Asp Gly Ser Pro Val
 1 5 10 15
 Pro Ser Ser Gln Pro Ala Phe Pro Val Gln Ile Leu Pro Tyr Leu Tyr
 20 25 30
 Leu Gly Cys Ala Lys Asp Ser Thr Asn Leu Asp Val Leu Gly Lys Tyr
 35 40 45
 Gly Ile Lys Tyr Ile Leu Asn Val Thr Pro Asn Leu Pro Asn Ala Phe
 50 55 60
 Glu His Gly Glu Phe Thr Tyr Lys Gln Ile Pro Ile Ser Asp His
 65 70 75 80
 Trp Ser Gln Asn Leu Ser Gln Phe Phe Pro Glu Ala Ile Ser Phe Ile
 85 90 95
 Asp Glu Ala Arg Ser Lys Lys Cys Gly Val Leu Val His Cys Leu Ala
 100 105 110
 Gly Ile Ser Arg Ser Val Thr Val Thr Val Ala Tyr Leu Met Gln Lys
 115 120 125
 Met Asn Leu Ser Leu Asn Asp Ala Tyr Asp Phe Val Lys Arg Lys Lys
 130 135 140
 Ser Asn Ile Ser Pro Asn Phe Asn Phe Met Gly Gln Leu Leu Asp Phe

*A
COM*

145 Glu Arg Thr Leu Gly Leu Ser Ser 150 155 160
165

<210> 13
<211> 168
<212> PRT
<213> *Homospaiens*

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<400> 13
Pro Ala Gln Ala Leu Pro Pro Ala Gly Ala Glu Asn Ser Asn Ser Asp
1 5 10 15
Pro Arg Val Pro Ile Tyr Asp Gln Gly Gly Pro Val Glu Ile Leu Pro
20 25 30
Tyr Leu Tyr Leu Gly Ser Cys Asn His Ser Ser Asp Leu Gln Gly Leu
35 40 45
Gln Ala Cys Gly Ile Thr Ala Val Leu Asn Val Ser Ala Ser Cys Pro
50 55 60
Asn His Phe Glu Gly Ile Phe His Tyr Lys Ser Ile Pro Val Glu Asp
65 70 75 80
Asn Gln Met Val Glu Ile Ser Ala Trp Phe Gln Glu Ala Ile Ser Phe
85 90 95
Ile Asp Ser Val Lys Asn Ser Gly Gly Arg Val Leu Val His Cys Gln
100 105 110
Ala Gly Ile Ser Arg Ser Ala Thr Ile Cys Leu Ala Tyr Leu Ile Gln
115 120 125
Ser His Arg Val Arg Leu Asp Glu Ala Phe Asp Phe Val Lys Gln Arg
130 135 140
Arg Gly Val Ile Ser Pro Asn Phe Ser Phe Met Gly Gln Leu Leu Gln
145 150 155 160
Leu Glu Thr Gln Val Leu Cys His
165

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<210> 14
<211> 169
<212> PRT
<213> *Homo sapiens*

<400> 14															
Pro	Leu	Ser	Thr	Ser	Val	Pro	Asp	Ser	Ala	Glu	Ser	Gly	Cys	Ser	Ser
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Cys	Ser	Thr	Pro	Leu	Tyr	Asp	Gln	Gly	Gly	Pro	Val	Glu	Ile	Leu	Pro
							20		25				30		
Phe	Leu	Tyr	Leu	Gly	Ser	Ala	Tyr	His	Ala	Ser	Arg	Lys	Asp	Met	Leu
							35		40			45			
Asp	Ala	Leu	Gly	Ile	Thr	Ala	Leu	Ile	Asn	Val	Ser	Ala	Asn	Cys	Pro
							50		55		60				
Asn	His	Phe	Glu	Gly	His	Tyr	Gln	Tyr	Lys	Ser	Ile	Pro	Val	Glu	Asp
							65		70		75			80	
Asn	His	Lys	Ala	Asp	Ile	Ser	Ser	Trp	Phe	Asn	Glu	Ala	Ile	Asp	Phe
							85		90			95			
Ile	Asp	Ser	Ile	Lys	Asn	Ala	Gly	Gly	Arg	Val	Phe	Val	His	Cys	Gln
							100		105			110			
Ala	Gly	Ile	Ser	Arg	Ser	Ala	Thr	Ile	Cys	Leu	Ala	Tyr	Leu	Met	Arg

115	120	125
Thr Asn Arg Val Lys Leu Asp Glu Ala Phe Glu Phe Val Lys Gln Arg		
130	135	140
Arg Ser Ile Ile Ser Pro Asn Phe Ser Phe Met Gly Gln Leu Leu Gln		
145	150	155
Phe Glu Ser Gln Val Leu Ala Pro His		
	165	

<210> 15
<211> 169
<212> PRT
<213> *Homo sapiens*

<400> 15
 Pro Val Pro Pro Ser Ala Thr Glu Pro Leu Asp Leu Gly Cys Ser Ser
 1 5 10 15
 Cys Gly Thr Pro Leu His Asp Gln Gly Gly Pro Val Glu Ile Leu Pro
 20 25 30
 Phe Leu Tyr Leu Gly Ser Ala Tyr His Ala Ala Arg Arg Asp Met Leu
 35 40 45
 Asp Ala Leu Gly Ile Thr Ala Leu Leu Asn Val Ser Ser Asp Cys Pro
 50 55 60
 Asn His Phe Glu Gly His Tyr Gln Tyr Lys Cys Ile Pro Val Glu Asp
 65 70 75 80
 Asn His Lys Ala Asp Ile Ser Ser Trp Phe Met Glu Ala Ile Glu Tyr
 85 90 95
 Ile Asp Ala Val Lys Asp Cys Arg Gly Arg Val Leu Val His Cys Gln
 100 105 110
 Ala Gly Ile Ser Arg Ser Ala Thr Ile Cys Leu Ala Tyr Leu Met Met
 115 120 125
 Lys Lys Arg Val Arg Leu Glu Glu Ala Phe Glu Phe Val Lys Gln Arg
 130 135 140
 Arg Ser Ile Ile Ser Pro Asn Phe Ser Phe Met Gly Gln Leu Leu Gln
 145 150 155 160
 Phe Glu Ser Gln Val Leu Ala Thr Ser
 165

<210> 16
<211> 171
<212> PRT
<213> *Homo sapiens*

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<400> 16
Ser Glu Arg Ala Leu Ile Ser Gln Cys Gly Lys Pro Val Val Asn Val
      .      5          10          15
Ser Tyr Arg Pro Ala Tyr Asp Gln Gly Gly Pro Val Glu Ile Leu Pro
      20          25          30
Phe Leu Tyr Leu Gly Ser Ala Tyr His Ala Ser Lys Cys Glu Phe Leu
      35          40          45
Ala Asn Leu His Ile Thr Ala Leu Leu Asn Val Ser Arg Arg Thr Ser
      50          55          60
Glu Ala Cys Met Thr His Leu His Tyr Lys Trp Ile Pro Val Glu Asp
      65          70          75          80
Ser His Thr Ala Asp Ile Ser Ser His Phe Gln Glu Ala Ile Asp Phe

```

	85	90	95
Ile Asp Cys Val Arg Glu Lys Gly Gly Lys Val Leu Val His Cys Glu			
100	105	110	
Ala Gly Ile Ser Arg Ser Pro Thr Ile Cys Met Ala Tyr Leu Met Lys			
115	120	125	
Thr Lys Gln Phe Arg Leu Lys Glu Ala Phe Asp Tyr Ile Lys Gln Arg			
130	135	140	
Arg Ser Met Val Ser Pro Asn Phe Gly Phe Met Gly Gln Leu Leu Gln			
145	150	155	160
Tyr Glu Ser Glu Ile Leu Pro Ser Thr Pro Asn			
165	170		

<210> 17
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 17

Val Pro Ser Val Gly	Leu Thr Arg Ile Leu Pro His Leu Tyr Leu Gly		
1	5	10	15
Ser Gln Lys Asp Val	Leu Asn Lys Asp Leu Met Thr Gln Asn Gly Ile		
20	25	30	
Ser Tyr Val Leu Asn Ala	Ser Asn Ser Cys Pro Lys Pro Asp Phe Ile		
35	40	45	
Cys Glu Ser Arg Phe Met	Arg Val Pro Ile Asn Asp Asn Tyr Cys Glu		
50	55	60	
Lys Leu Leu Pro Trp	Leu Asp Lys Ser Ile Glu Phe Ile Asp Lys Ala		
65	70	75	80
Lys Leu Ser Ser Cys Gln	Val Ile Val His Cys Leu Ala Gly Ile Ser		
85	90	95	
Arg Ser Ala Thr Ile Ala Ile	Ala Tyr Ile Met Lys Thr Met Gly Met		
100	105	110	
Ser Ser Asp Asp Ala Tyr Arg	Phe Val Lys Asp Arg Arg Pro Ser Ile		
115	120	125	
Ser Pro Asn Phe Asn Phe	Leu Gly Gln Leu Leu Glu Tyr Glu Arg Thr		
130	135	140	
Leu Lys Leu Leu Ala			
145			

<210> 18
 <211> 127
 <212> PRT
 <213> Homo sapiens

<400> 18

Met Gly Asn Gly Met Lys Ile Leu Pro	Gly Leu Tyr Ile Gly Asn Phe		
1	5	10	15
Lys Asp Ala Arg Asp Ala Glu Gln	Leu Ser Lys Asn Lys Val Thr His		
20	25	30	
Ile Leu Ser Val His Asp Ser Pro	Gly Leu Cys Trp Arg Thr Arg His		
35	40	45	
Phe Lys Glu Ser Ile Lys Phe Ile His Glu	Cys Arg Leu Arg Gly Glu		
50	55	60	
Ser Cys Leu Val His Cys Leu Ala Gly Val	Ser Arg Ser Val Ile Leu		

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65	70	75	80
Val Ile Ala Tyr	Ile Met Thr Val Ile Asp Phe Gly Trp Glu Asp Ala		
	85	90	95
Leu His Thr Val Arg Ala Gly Arg Ser Cys Ala Asn Pro Asn Val Gly			
	100	105	110
Phe Gln Arg Gln Leu Gln Glu Phe Glu Lys His Glu Val His Gln			
	115	120	125

a' cont. subr. D